

CELLBOX Split-Units for Chilling (KS) and Freezing (TS) – R452a



for refrigeration of coldrooms

The CELLBOX BLOCK SYSTEMS consist of a ready-to-use condensation unit, a vaporizer, and an electronic temperature controller. They provide a simple solution for various refrigeration applications. They are available in different designs and deliver reliability due to accurate selection of components, our most stringent production and quality controls, and our long-time experience in refrigeration.

GENERAL TECHNICAL CHARACTERISTICS

- **Coolant: R452a**
- Self-supporting housing consisting of galvanized sheets, powder-coated
- Electronic temperature display and controller which - by means of an interface converter available as optional equipment - facilitate the connection to the a monitoring and remote maintenance system.
- Compressor (hermetic or semi-hermetic) with thermal coil protection
- CE approval
- Operating conditions: + 5 / + 43° C.
- Winter and/or tropics controller optional
- Air-cooled condensers (water-cooled condensers are available upon request)
- Expansion by means of capillary tube or expansion valve
- Automatic defrosting programmable by means of controller
- Heat exchanger with copper pipes and aluminium ribs

CELLBOX KS – Split-Unit for Chilling - R452a

- 5 / + 5 °C

Compact chilling unit as split device

Coolant: R452a

Standard equipment:

- For ambient temperature of up to 43°C
- Pre-filled coolant lines 5 m
- Electronic controller
- Remote control panel: connection length corresponds to cooling line
- Door contact switch: connection length corresponds to cooling line
- Lighting, cord length corresp. to cooling line
- Connection for pre-filled coolant lines
- High pressure switch
- Condensate discharge connection to the outside (with heater, without pipeline)
- Power cord 2.5 m with plug, fuse protection provided by customer

Refer to pages 6-7 for figures and dimensions

Type	CELLBOX KS 100	CELLBOX KS 200	CELLBOX KS 300	CELLBOX KS 400								
Form	Aa	Ab	Ba	Bb								
Electrical Parameters												
Voltage Volt/Ph/Hz	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	400 / 3 / 50								
Power consumption W	829	1145	1200	1292								
Current consumption A	5.2	5.6	5.8	3.4								
Compressor												
Type / output W	Fully hermetic - 370	Fully hermetic - 740	Fully hermetic - 880	Fully hermetic - 920								
Condenser												
Fan (diameter) mm	1 x 254	1 x 254	1 x 300	1 x 300								
Air quantity m ³ / h	683	657	1270	1206								
Vaporizer												
Fan (diameter) mm	1 x 200	2 x 200	2 x 200	2 x 250								
Air quantity m ³ / h	600	1213	1170	1602								
Air dispersion m	3	3.5	3.5	3.5								
Expansion	Capillary tube	Capillary tube	Capillary tube	Expansion valve								
Type of defrosting	Electrical	Electrical	Electrical	Electrical								
Weight net / gross (kg)	58 / 69	61 / 79	78 / 97	85 / 105								
Noise level ¹⁾ db(A)	34,0	42,2	44,2	44,4								
Cooling output W												
Coldroom temp. °C	+5	0	-5	+5	0	-5	+5	0	-5	+5	0	-5
At +32° C outside temp.	1112	979	855	1711	1501	1301	2226	1932	1656	2522	2165	1833
At +43° C outside temp.	939	829	719	1458	1269	1092	1895	1641	1403	2140	1834	1545
Coldroom volume m³					All values based on PUR 80 mm insulation thickness							
Coldroom temperature °C	+5	0	-5	+5	0	-5	+5	0	-5	+5	0	-5
At +32° C outside temp.	9,1	6,0	4,0	17,0	11,9	7,9	23,7	16,3	10,5	28,1	19,1	12,1
At +43° C outside temp.	6,1	4,2	3,4	11,7	7,6	6,5	17,1	11,0	8,5	21,0	13,1	9,9

Accessories:

- Water-cooled condenser
- Oil sump heater
- Winter controller complete consisting of: ²⁾
 - Pressostatic speed controller
 - Oil sump heater
 - Low pressure switch
- Expansion valve (standard for KS 400)
- Pre-filled coolant lines 10 m
- Pre-filled coolant lines 15 m

¹⁾ Measured in 10 m distance; variations possible depending on ambient conditions.

²⁾ Winter control necessary at ambient temperatures of < +5°C. When mounted outside, unit must be roofed in.

³⁾ As for the scope of installation, please notice description on page 9.

CELLBOX KS – Split-Unit for Chilling – R452a

- 5 / + 5 °C

Compact chilling unit as split device

Coolant: R452a

Standard equipment:

- For ambient temperature of up to 43°C
- Pre-filled coolant lines 5 m
- Electronic controller
- Remote control panel: connection length corresponds to cooling line
- Door contact switch: connection length corresponds to cooling line
- Lighting, cord length corresp. to cooling line
- Connection for pre-filled coolant lines
- High pressure switch
- Condensate discharge connection to the outside (with heater, without pipeline)
- Power cord 2.5 m with plug, fuse protection provided by customer

Refer to page 8 for figures and dimensions

Type	CELLBOX KS 500	CELLBOX KS 600	CELLBOX KS 700						
Form	Bc	C	C						
Electrical Parameters									
Voltage Volt/Ph/Hz	400 / 3 / 50	400 / 3 / 50	400 / 3 / 50						
Power consumption W	1525	1615	1990						
Current consumption A	4.6	4.8	5.3						
Compressor									
Type / output W	Fully hermetic - 1100	Fully hermetic - 1100	Fully hermetic - 1470						
Condenser									
Fan (diameter) mm	1 x 300	1 x 350	1 x 350						
Air quantity m ³ / h	1206	2116	2035						
Vaporizer									
Fan (diameter) mm	3 x 254	3 x 254	3 x 254						
Air quantity m ³ / h	2364	2364	2167						
Air dispersion m	7,5	7,5	7						
Expansion	Expansion valve	Expansion valve	Expansion valve						
Type of defrosting	Electrical	Electrical	Electrical						
Weight net / gross (kg)	92 / 114	102 / 125	113 / 136						
Noise level¹⁾ db(A)	44,7	44,6	44,6						
Cooling output W									
Coldroom temp. °C	+5	0	-5	+5	0	-5	+5	0	-5
At +32° C outside temp.	3099	2703	2323	3264	2833	2423	3809	3281	2778
At +43° C outside temp.	2564	2227	1906	2723	2352	2001	3136	2687	2255
Coldroom volume m³	All values based on PUR 80 mm insulation thickness								
Coldroom temperature °C	+5	0	-5	+5	0	-5	+5	0	-5
At +32° C outside temp.	37,1	26,0	16,8	39,6	27,6	17,8	47,1	36,1	23,5
At +43° C outside temp.	27,3	17,3	13,3	29,6	18,6	14,2	35,0	20,5	16,4

Accessories:

- Water-cooled condenser
- Oil sump heater
- Winter controller complete consisting of: ²⁾
 - Pressostatic speed controller
 - Oil sump heater
 - Low pressure switch
- Pre-filled coolant lines 10 m
- Pre-filled coolant lines 15 m

¹⁾ Measured in 10 m distance; variations possible depending on ambient conditions.

²⁾ Winter control necessary at ambient temperatures of < +5°C. When mounted outside, unit must be roofed in.

³⁾ As for the scope of installation, please notice description on page 9.

CELLBOX TS - Split-Unit for Freezing - R452a**-15 / -25 °C**

Compact freezing unit as split device

Coolant: **R452a****Standard equipment:**

- For ambient temperature of up to 43°C
- Pre-filled coolant lines 5 m
- Electronic controller
- Remote control panel: connection length corresponds to cooling line
- Door contact switch: connection length corresponds to cooling line
- Lighting, cord length corresp. to cooling line
- Connection for pre-filled coolant lines
- High pressure switch
- Condensate discharge connection to the outside (with heater, without pipeline)
- Power cord 2.5 m with plug, fuse protection provided by customer

Refer to pages 6-7 for figures and dimensions

Type	CELLBOX TS 100	CELLBOX TS 200	CELLBOX TS 300	CELLBOX TS 400								
Form	Aa	Aa	Ab	Bb								
Electrical Parameters												
Voltage Volt/Ph/Hz	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50								
Power consumption W	602	786	1061	1067								
Current consumption A	3.4	3.8	5.7	6.0								
Compressor												
Type / output W	Fully hermetic – 740	Fully hermetic – 740	Fully hermetic - 1100	Fully hermetic - 1100								
Condenser												
Fan (diameter) mm	1 x 254	1 x 254	1 x 254	1 x 300								
Air quantity m ³ / h	630	657	657	1270								
Vaporizer												
Fan (diameter) mm	1 x 200	1 x 200	2 x 200	2 x 254								
Air quantity m ³ / h	630	600	1230	1602								
Air dispersion m	3	3	3.5	7.5								
Expansion	Expansion Valve	Expansion Valve	Expansion Valve	Expansion Valve								
Type of defrosting	Electric	Electric	Electric	Electric								
Weight net / gross (kg)	58 / 74	62 / 78	66 / 84	78 / 98								
Noise level¹⁾ db(A)	33,8	42,1	42,6	44,4								
Cooling output W												
Coldroom temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25	-15	-20	-25
At +32° C outside temp.	734	624	522	963	808	663	1221	1028	845	1522	1264	1025
At +43° C outside temp.	612	519	431	806	665	533	1029	857	692	1253	1033	826
Coldroom volume m³	All values based on PUR 100 mm insulation thickness											
Coldroom temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25	-15	-20	-25
At +32° C outside temp.	5,6	3,3	1,9	8,5	5,0	2,7	13,1	7,3	4,1	21,3	11,5	6,6
At +43° C outside temp.	3,4	2,2	1,3	5,4	3,1	2,0	10,1	5,4	3,6	13,9	7,5	5,1

Accessories:

- Water-cooled condenser
- Signal amplifier for remote control panel >10m
- Winter controller complete consisting of:²⁾
 - Pressostatic speed controller
 - Oil sump heater
 - Low pressure switch
- Oil sump heater
- Low pressure switch
- Pre-filled coolant lines 10 m
- Pre-filled coolant lines 15 m

¹⁾ Measured in 10 m distance; variations possible depending on ambient conditions.²⁾ Winter control necessary at ambient temperatures of < +5°C. When mounted outside, unit must be roofed in.³⁾ As for the scope of installation, please notice description on page 9.

CELLBOX TS – Split-Units for Freezing – R452a

-15 / -25 °C

Compact freezing unit as split device

Coolant: R452a

Standard equipment:

- For ambient temperature of up to 43°C
- Pre-filled coolant lines 5 m
- Electronic controller
- Remote control panel: connection length corresponds to cooling line
- Door contact switch: connection length corresponds to cooling line
- Lighting, cord length corresp. to cooling line
- Connection for pre-filled coolant lines
- High pressure switch
- Condensate discharge connection to the outside (with heater, without pipeline)
- Power cord 2.5 m with plug, fuse protection provided by customer

Refer to page 7-8 for figures and dimensions

Type	CELLBOX TS 500	CELLBOX TS 600	CELLBOX TS 700						
Form	Bb	C	C						
Electrical Parameters									
Voltage Volt/Ph/Hz	400 / 3 / 50	400 / 3 / 50	400 / 3 / 50						
Power consumption W	1428	1533	1852						
Current consumption A	3.6	4.3	5.0						
Compressor									
Type / output PS	Fully hermetic - 1470	Fully hermetic - 1470	Fully hermetic - 2200						
Condenser									
Fan (diameter) mm	1 x 300	1 x 350	1 x 350						
Air quantity m ³ / h	1206	2116	2035						
Vaporizer									
Fan (diameter) mm	2 x 254	3 x 254	3 x 254						
Air quantity m ³ / h	1602	2364	2364						
Air dispersion m	7.5	7.5	7.5						
Expansion	Expansion Valve	Expansion Valve	Expansion Valve						
Type of defrosting	Electric	Electric	Electric						
Weight net / gross (kg)	89 / 109	111 / 134	111 / 134						
Noise level¹⁾ db(A)	45,0	44,6	46,3						
Cooling output W									
Coldroom temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
At +32° C outside temp.	1875	1553	1254	2187	1809	1458	2599	2144	1725
At +43° C outside temp.	1582	1290	1018	1834	1492	1174	2174	1770	1397
Coldroom volume m³	All values based on PUR 100 mm insulation thickness								
Coldroom temperature °C	-15	-20	-25	-15	-20	-25	-15	-20	-25
At +32° C outside temp.	24,7	15,3	8,9	27,3	16,5	9,3	43,7	25,4	14,1
At +43° C outside temp.	17,5	9,7	6,0	21,9	12,8	7,3	32,3	24,3	11,0

Accessories:

- Water-cooled condenser
- Oil sump heater
- Winter controller complete consisting of: ²⁾
 - Pressostatic speed controller
 - Oil sump heater
 - Low pressure switch
- Low pressure switch
- Pre-filled coolant lines 10 m
- Pre-filled coolant lines 15 m

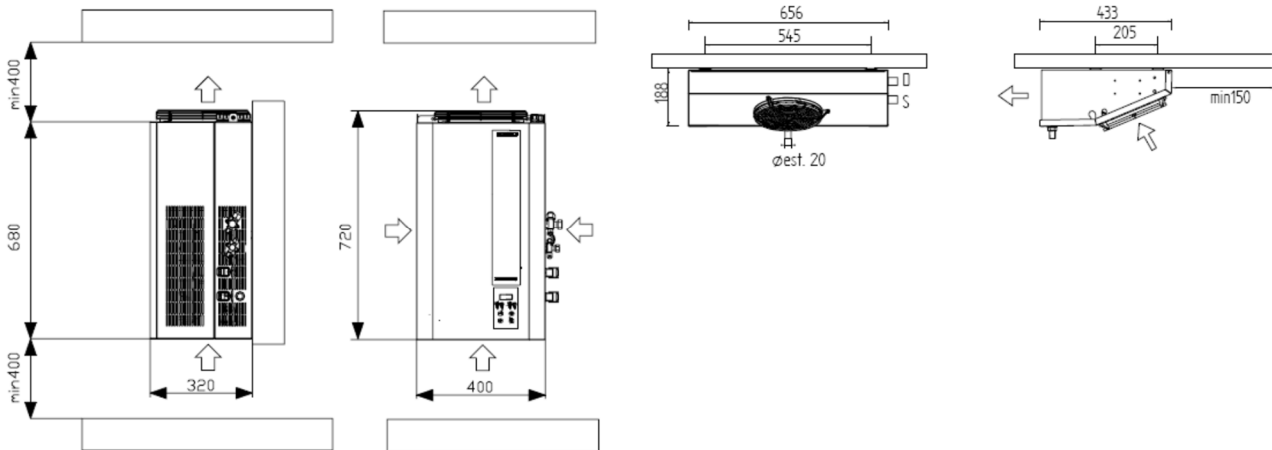
¹⁾ Measured in 10 m distance; variations possible depending on ambient conditions.

²⁾ Winter control necessary at ambient temperatures of < +5°C. When mounted outside, unit must be roofed in.

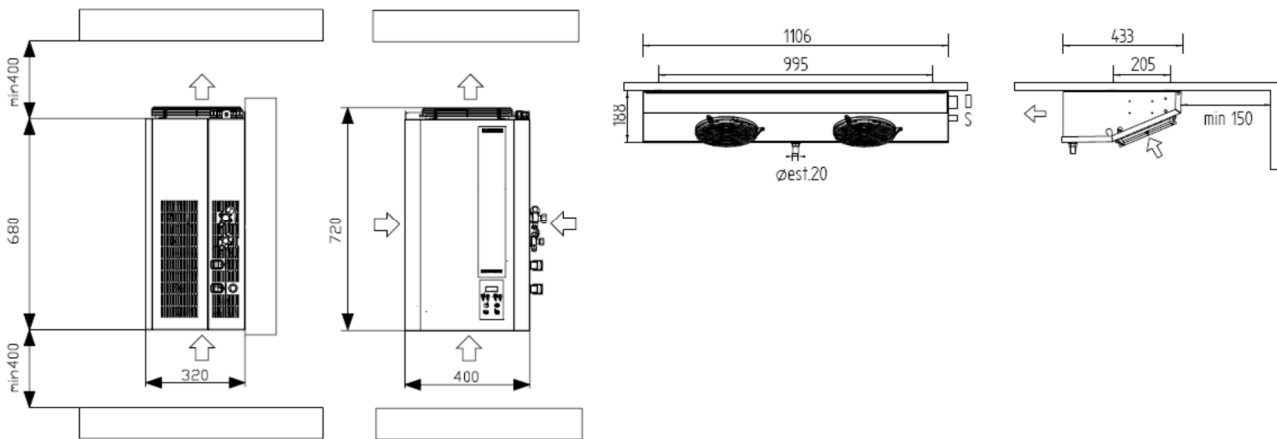
³⁾ As for the scope of installation, please notice description on page 9.

CELLBOX Split-Units (R452a) – Figures and Dimensions

FORM Aa Packaging dimensions WxLxH : 800 x 600 x 1120 mm

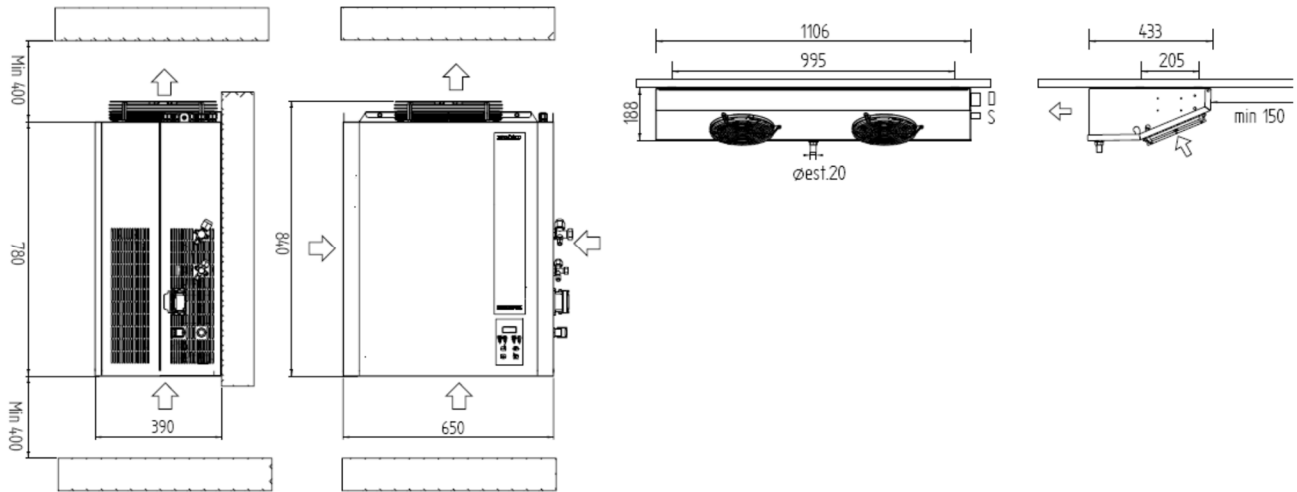


FORM Ab Packaging dimensions WxLxH: 1240 x 600 x 1120 mm

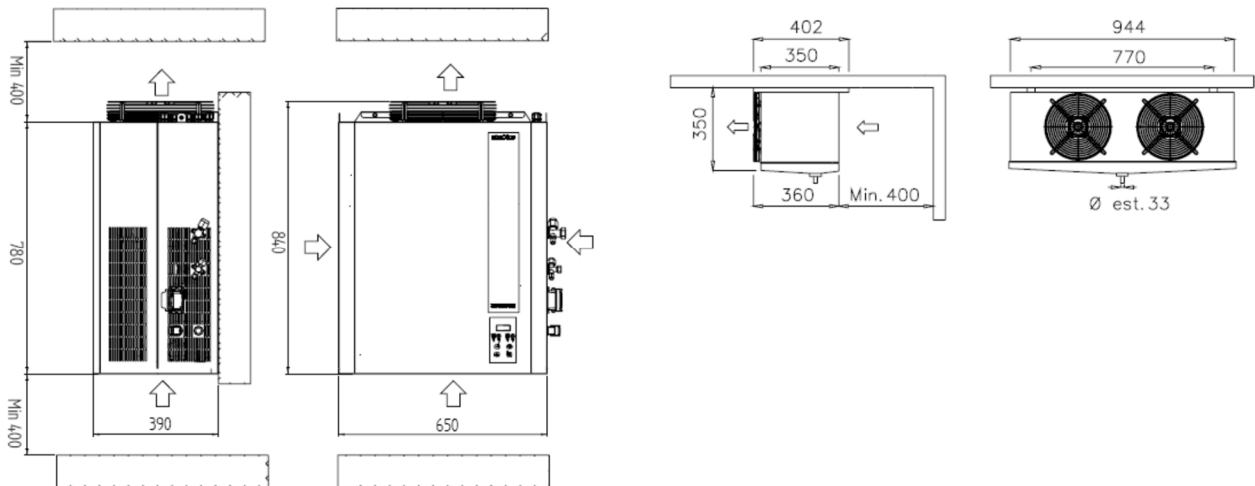


CELLBOX Split-Units (R452a) – Figures and Dimensions

FORM Ba Packaging dimensions WxLxH: 1240 x 600 x 1425 mm

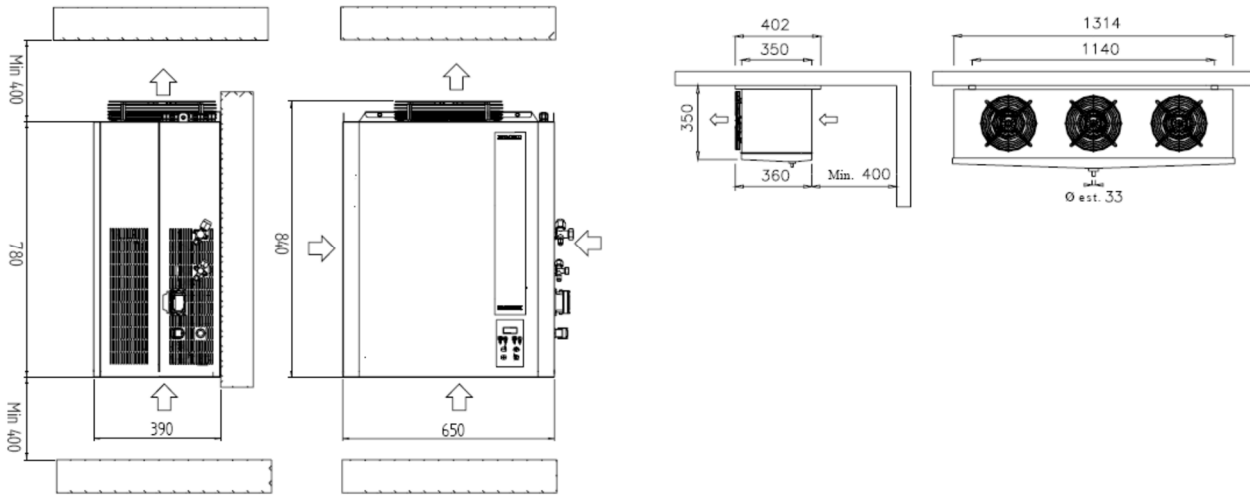


FORM Bb Packaging dimensions WxLxH: 1240 x 600 x 1425 mm



CELLBOX Split-Units (R452a) – Figures and Dimensions

FORM Bc Packaging dimensions WxLxH: 1435 x 600 x 1475 mm



FORM C Packaging dimensions WxLxH: 1435 x 600 x 1475 mm

